



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,182	02/17/2004	Mark Emmett Malone	F3330(C)	9861
201	7590	08/13/2004	EXAMINER	
UNILEVER PATENT DEPARTMENT 45 RIVER ROAD EDGEWATER, NJ 07020			DONOVAN, MAUREEN C	
		ART UNIT	PAPER NUMBER	1761

DATE MAILED: 08/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/780,182	MALONE ET AL.	
	Examiner	Art Unit	
	Maureen C Donovan	1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 14 June 2004.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-17 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-17 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.

5) Notice of Informal Patent Application (PTO-152)

6) Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Objections

1. Claims 9,10,11 and 12 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 9,10,11 and 12 are dependent on claim 1 which recites an overrun of above 20% and below 100%. Claim 9 claims an overrun of less than 70%, which could include percentages under 20%, which broadens, and not limits the recitation of claim 1. Claim 10 claims an overrun of less than 60%, which could include percentages under 20%, which broadens, and not limits the recitation of claim 1. Claim 11 claims an overrun of more than 40%, which could include percentages greater than 100%, which broadens, and not limits the recitation of claim 1. Claim 12 claims an overrun of more than 50%, which could include percentages greater than 100%, which broadens, and not limits the recitation of claim 1.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 6 recites the broad recitation "less than 0.25% glycerol", and the claim also recites "preferably less than 0.1%" which is the narrower statement of the range/limitation.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1, 2, 3, 5, 6, 7, 8 and 9-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Cole, US patent number 4 452 824.

Cole discloses a frozen product comprising a cartridge (see Column 1, lines 52-55) containing a frozen aerated product having an overrun chosen from the range of 50- 200%, which would include overruns of less than 100%, less than 70%, less than 60%, less than 50% and overruns more than 40% and more than 50%, if desired (see Column 4, lines 66-68 and Column 5, lines 1-10). Note that the reference discloses that the overrun is chosen based on the density of the resulting product desired (see Column 4, lines 66-68 and Column 5, lines 1-10). Cole discloses that the product includes less than 1.5% w/w glycerol (containing no glycerol) (see Columns 7 and 8, Table 2, Run # 89), freezing point depressants in an amount above 25 % w/w and below 37 % w/w (see Column 2, lines 6-8 and lines 14-17), less than 5 % w/w fructose (containing no fructose) (see Columns 7 and 8, Table 2, Run # 89), between 2% and 8% proteins (see Column 5, lines 65-66) and between 0 and 15% fat, and between 2% and 12% fat (see Column 5, lines 25-30). Note that the office interprets that the reference teaches the fat concentrations as claimed since the reference teaches that the fat

content is not critical and is variable around the range disclosed, which is 2-15% fat. Cole inherently discloses that the freezing point depressants have a number average molecular weight of less than 300 and less than 275 (see Columns 7 and 8, Tables 1 and 2, Run #'s 89,90,93, and 85). Although the reference is silent to the number average molecular weight of the freezing point depressants used, one of ordinary skill in the art would appreciate that the weight percents as disclosed by Cole, would inherently have a number average molecular weight that is below 300 and below 275 seeing that Cole discloses all other structural limitations of the frozen aerated product and the freezing point depressants used by Cole are from the group as disclosed by the applicant (see Specification, pages 4-5) and in the weight percent as instantly claimed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
1. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cole '824 as applied to claims 1,2,3,5,6,7,8, and 9-12 above and further in view of Cole, US patent number 4 374 154.

Cole '824 discloses all the features of the instantly claimed invention except for the freezing point depressants having being constituted at 98% of mono, di and oligosaccharides.

Cole '154 teaches a frozen aerated confection that has freezing point depressants that are constituted at a level of at least 98% of mono, di and oligosaccharides (see Columns 9 and 10, Table 5, Run#25).

Using the freezing point depressant constitution as taught by Cole '154 in the invention as disclosed by Cole '824 would have been obvious to one of ordinary skill in the art at the time of the invention since both are directed to low temperature soft serve frozen confections and since the constitution as taught by Cole would produce a product that was sufficiently soft at low temperatures to be extrudable (see Column 1, lines 46-48).

2. Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cole '824 as applied to claims 1,2,3,5,6,7,8, and 9-12 above and further in view of De Vries, US patent number 3 752 364.

Cole '824 discloses all the features of the instantly claimed invention except for the exact type of cartridge to be used for the frozen aerated product.

De Vries teaches a cartridge for a frozen aerated product such as ice cream (see Column 1, lines 17-20), wherein the cartridge comprises a hollow cylindrical body (see Column 1, lines 51-52 and Figure 1, Reference number 3) which is open at one end and closed by an end wall at the other end, a dispensing aperture in the end wall through which the frozen aerated product is dispensed (see Figure 1 and Column 1, lines 61-63 and Column 2, lines 1-8). Note that when the stopper is removed from the container as taught by De Vries, the container is open at one end. De Vries teaches that the container has a plunger which sealingly fits within the bore of the cylindrical body and which is movable within the bore of the cylindrical body towards the end wall so as to urge the frozen aerated product towards the dispensing aperture whereby it can be extruded through the dispensing aperture (see Figure 1 and Column 2, lines 7-8). Note that the word "aperture" for purposes of this examination was taken to mean "an opening or open space", as defined by Merriam Webster's Collegiate Dictionary, 10th Edition, lacking a more specific definition in the applicant's disclosure. De Vries teaches that the dispensing aperture is covered prior to use by a removable seal or a flexible membrane sealed to the body to enclose the frozen aerated confection prior to dispensing (see Column 2, lines 2-3, lines 5-6 and lines 24-26 and Figure 1, Reference number 14). Note that the office interprets the stopper as taught by De Vries to be "flexible" as it is made of plastic, a flexible material (definition of the word "flexible" by Merriam Webster's Collegiate Dictionary, 10th Edition is "pliant" and definition of the word "plastic" by the same is "pliable" therefore a plastic material is flexible). De Vries also teaches that the end wall is in the shape

of a truncated cone (see Figure 1, Reference 5) with the larger circular base of the cone being directly attached to the end of the cylindrical wall of the cartridge (see Figure 1, Reference number 5 and 18) and the dispensing aperture being located in the smaller circular surface of the truncated cone (see Figure 1, Reference number 13) and a cylindrical wall of the cartridge that extends outwardly beyond the end wall (see Figure 1, Reference number 18).

Using the cartridge structure as taught by De Vries for the generic cartridge as disclosed by Cole '824 would have been obvious to one of ordinary skill in the art at the time of the invention since both are directed to ways of dispensing frozen aerated products and since the cartridge as taught by De Vries would be convenient for both the transport and dispensing of the frozen product (see De Vries, Column 1, lines 49-51).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claims 1-17 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of copending Application No. 10/323303 in view of Cole, US patent number 4 452 824 and De Vries, US patent number 3 752 364.

Application No. 10/323303 claims a frozen aerated confection with an overrun of above 80% and below 250% (see Claim 1, lines 3-4). Application No. 10/323303 claims a glycerol concentration below 0.5% w/w, less than 0.25% and less than 0.1% in the frozen aerated confection (see Claim 1, lines 5-6 and Claim 6, lines 27-29). Note, Application No. 10/780182 claims a glycerol concentration below 1.5% w/w, which is satisfied by a concentration below 0.5% w/w.

Application No. 10/323303 claims the frozen aerated confection includes freezing point depressants in an amount above 25% w/w and under 37% w/w and between 0 and 15% w/w fat, wherein the freezing point depressants have a number average molecular weight of less than 300 (see Claim 1, lines 6-11).

Application No. 10/323303 claims the frozen aerated confection includes between 2% and 12% fat (see Claim 2, lines 13-14), the freezing point depressants having a number average molecular weight below 275 (see Claim 3, lines 16-18), the freezing point depressants comprised of at least 98% of mono, di and oligosaccharides (see Claim 4, lines 20-22), less than 5% w/w fructose (see Claim 5, lines 24-25) and that the frozen aerated confection contains no more than 2% and less than 8% proteins (see Claim 7, lines 31-32).

Application No. 10/323303 does not teach that an overrun in the range of 20%-80% or the exact type of cartridge to be used for the frozen aerated product.

Cole '824 discloses a frozen product comprising a cartridge (see Column 1, lines 52-55) containing a frozen aerated product having an overrun chosen from the range of 50- 200%, which would include overruns of less than 100%, less than 70%, less than 60%, less than 50% and overruns more than 40% and more than 50%, if desired (see Column 4, lines 66-68 and Column 5, lines 1-10). Note that the reference discloses that the overrun is chosen based on the density of the resulting product desired (see Column 4, lines 66-68 and Column 5, lines 1-10).

De Vries teaches a cartridge for a frozen aerated product such as ice cream (see Column 1, lines 17-20), wherein the cartridge comprises a hollow cylindrical body (see Column 1, lines 51-52 and Figure 1, Reference number 3) which is open at one end and closed by an end wall at the other end, a dispensing aperture in the end wall through which the frozen aerated product is dispensed (see Figure 1 and Column 1, lines 61-63 and Column 2, lines 1-8). Note that when the stopper is removed from the container as taught by De Vries, the container is open at one end. De Vries teaches that the container has a plunger which sealingly fits within the bore of the cylindrical body and which is movable within the bore of the cylindrical body towards the end wall so as to urge the frozen aerated product towards the dispensing aperture whereby it can be extruded through the dispensing aperture (see Figure 1 and Column 2, lines 7-8). Note that the word "aperture" for purposes of this examination was taken to mean "an opening or open space", as defined by Merriam Webster's Collegiate Dictionary, 10th Edition, lacking a more specific definition in the applicant's

disclosure. De Vries teaches that the dispensing aperture is covered prior to use by a removable seal or a flexible membrane sealed to the body to enclose the frozen aerated confection prior to dispensing (see Column 2, lines 2-3, lines 5-6 and lines 24-26 and Figure 1, Reference number 14). Note that the office interprets the stopper as taught by De Vries to be "flexible" as it is made of plastic, a flexible material (definition of the word "flexible" by Merriam Webster's Collegiate Dictionary, 10th Edition is "pliant" and definition of the word "plastic" by the same is "pliable" therefore a plastic material is flexible). De Vries also teaches that the end wall is in the shape of a truncated cone (see Figure 1, Reference 5) with the larger circular base of the cone being directly attached to the end of the cylindrical wall of the cartridge (see Figure 1, Reference number 5 and 18) and the dispensing aperture being located in the smaller circular surface of the truncated cone (see Figure 1, Reference number 13) and a cylindrical wall of the cartridge that extends outwardly beyond the end wall (see Figure 1, Reference number 18).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention as claimed in Application No. 10/323303 by Cole '824 since both are directed to frozen aerated confections and in order to obtain a denser final product, which is achieved by lowering the overrun percent, as explained by Cole '824 (see Column 4, lines 66-68 and Column 5, lines 1-10). Using the cartridge structure as taught by De Vries for the product as claimed in Application No. 10/323303 as modified by Cole '824, would have been obvious to one of ordinary skill in the art at the time of the invention since the cartridge as

Art Unit: 1761

taught by De Vries would be convenient for both the transport and dispensing of the frozen product (see De Vries, Column 1, lines 49-51).

This is a provisional obviousness-type double patenting rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maureen C Donovan whose telephone number is (571) 272-2739. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MCD



MILTON I. CANO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700